LAND LABOR MANAGEMENT CAPITAL

FARM MANAGEMENT DIVISION

NOVA SCOTIA DEPARTMENT
OF
AGRICULTURE AND MARKETING

INVESTMENT LIMITS

1983

SHEEP

37

INVESTMENT LIMITS

- SHEEP -

A number of basic assumptions were made to estimate investment or borrowed capital limits for the sheep enterprise. These assumptions were necessary because of the lack of actual on-farm data. They are based on the observations and experience of department staff in working with sheep producers. These assumptions and the methodology used in this paper are set out below.

ASSUMPTIONS

1. Gross Receipts - Gross receipts is the sum of lamb and wool sales calculated on a per ewe basis. Lamb sales were estimated on the basis of eighty (80) percent of the lambs being sold as market lambs, weighing an average of 41 kilograms each. The remaining twenty (20) percent of lambs were sold as feeder lambs at an average weight of 32 kilograms each. Wool sales averaged 2.73 kilograms per ewe at a price of $1.89 per kilogram. In the above calculations, the price spread between the two classes of lambs sold was $0.154 per kilogram - the higher price being in favor of the feeder lambs.

2. Expenses - Expenses were estimated for the sheep enterprise from information supplied by the Livestock Services Branch. Expenses include all cash operating costs. They are listed in the table below. These costs were calculated on the basis of a 130 percent lamb crop. Expenses will change by $.32 for each five (5) percent change in lambing percentage.

Hay - 303 kg @ $.036 per kg (variable cost)	$ 10.91
Grain - 45 kg @ $.153 per kg	6.89
Salt & Minerals	0.79
Vet & Drugs	2.50
Ewe Mortality	5.00
Pasture - Hay Equivalent 1.36 kg/Day @ $.036/kg x 180 Days..	8.81
Shearing	1.40
Fencing	2.85

.../2

Marketing	$ 3.67
Interest - Operating Capital @ 14%	2.74
TOTAL OPERATING COSTS	$ 45.56

3. Labor - Operator labor was estimated to be $21.80 per ewe. This amount represents a return to the operator for his labor skills and must be considered to be a minimum living allowance.

4. Formula - The following formula was then used to calculate a residual to cover fixed or ownership costs.

GROSS RECEIPTS - EXPENSES - LABOR = RESIDUAL FOR FIXED COSTS

5. Fixed Costs - Fixed costs, by our definition includes depreciation, interest, repairs, taxes and insurance. Annual fixed costs were estimated to be 22.625 percent of total investment.

The following basic assumptions were used to estimate the annual charge:

Depreciation was calculated in the standard manner on buildings, equipment and livestock at 5, 12 and 20 percent respectively.

Interest was calculated in the usual manner on land and buildings at 8 percent, and on equipment and livestock at 14 percent.

Repairs were calculated in the usual manner on buildings and equipment at 2.5 and 3 percent respectively.

Taxes were estimated to be 2 percent of the average value of buildings.

Insurance was estimated on buildings and livestock at 3 percent of the average value.

.../3

Given the above basic data, investment limits were estimated for various lamb price - lambing percentage combinations. These investment limits are presented in the table on the following page.

LIMITATION

It should be noted that the figures shown in the table are estimates only. Care should be taken in their use and interpretation.

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- SHEEP -

PRICE/MARKET	LAMBING PERCENTAGE														
LAMB	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190
1.45	25	36	48	59	70	82	93	104	116	127	139	150	161	173	184
1.50	35	47	59	71	82	94	106	118	130	141	153	165	177	189	200
1.55	46	58	70	82	95	107	119	131	144	156	168	180	192	205	217
1.60	56	69	81	94	107	119	132	145	157	170	183	195	208	221	233
1.65	66	80	93	106	119	132	145	158	171	184	197	211	224	237	250
1.70	77	90	104	118	131	144	158	172	185	199	212	226	239	253	266
1.75	87	101	115	129	143	157	171	185	199	213	227	241	255	269	283
1.80	98	112	127	141	155	170	184	198	213	227	242	256	270	285	299
1.85	108	123	138	153	167	182	197	212	227	242	256	271	286	301	316
1.90	118	133	149	164	179	195	210	226	241	256	271	286	302	317	332
1.95	129	145	160	176	191	207	223	239	254	270	286	301	317	333	349
2.00	139	155	172	188	204	220	236	252	268	284	301	317	333	349	365
2.05	150	166	183	200	216	232	249	266	282	299	315	332	348	365	382
2.10	160	177	194	211	228	245	262	279	296	313	330	347	364	381	398
2.15	170	188	205	223	240	257	275	292	310	327	345	362	380	397	414
2.20	181	199	217	235	252	270	288	306	324	342	359	377	395	413	431
2.25	191	210	228	246	264	283	301	319	338	356	374	392	411	429	447
2.30	202	220	239	258	276	295	314	333	351	370	389	408	426	445	464
2.35	212	231	251	270	288	308	327	346	365	384	404	423	442	461	480
2.40	222	242	262	282	300	320	340	360	379	399	418	438	458	477	497
2.45	233	253	273	293	313	333	353	373	393	413	433	453	473	493	513
2.50	243	264	284	305	325	345	366	386	407	427	448	468	489	509	530